Abstract

The present inventors have carried out intensive screening of a new type compound which inhibits the $P2X_{2/3,3}$ receptor and found as a result that minodronic acid as a bisphosphonate having bone resorption inhibitory action shows excellent $P2X_{2/3,3}$ receptor inhibitory action and can be used as a preventive or therapeutic agent for various pains, thus accomplishing the invention. That is, the invention relates to a $P2X_{2/3,3}$ receptor inhibitor, particularly an analgesic, which comprises minodronic acid or a salt thereof as the active ingredient.

Since the "$P2X_{2/3}$ and/or $P2X_3$ receptor inhibitor" of the invention inhibits the function of $P2X_{2/3,3}$ receptor known as a molecule which is concerned in various pains consisting of nociceptive pain, inflammatory pain and neurogenic pain, it is useful for the prevention or treatment of various pains in which the $P2X_{2/3,3}$ receptor is concerned in the pain transduction.